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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,346	05/05/2006	Kenichi Noma	062512	6645

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EXAMINER

MONIKANG, GEORGE C

ART UNIT PAPER NUMBER

2615

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/578,346	Applicant(s) NOMA ET AL.	
	Examiner George C. Monikang	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/5/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10578346.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/5/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Ikeda et al, US Patent 6,957,083 B2.

Re Claim 1, Ikeda et al discloses a foldable portable terminal comprising a body cabinet (1) and a cover cabinet (2) openably/closably coupled to each other (fig. 1a); a first speaker (41) disposed in the cover cabinet(2) (fig. 1a: 103); one or more sound emitting holes 22a for passing a sound wave emitted from the first speaker (41) (fig. 1a: 103), provided on an inner surface of the cover cabinet (2) in a position opposed to a sound emitting surface of the first speaker (41) (fig. 1a: 103); one or more openings (12a) provided on an inner surface of the body cabinet (1) in a position to be opposed to the sound emitting holes (22a) with the both cabinets (1, 2) closed (fig. 1a: 205); a microphone (14) having a sound collecting surface facing the openings (12a), disposed in the body cabinet (1) (fig. 1a: 205); and a second speaker (42) for emitting a sound wave toward a rear surface of the cover cabinet (2), disposed in the cover cabinet (2) (fig. 1a: 106),

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wherein the foldable portable terminal comprises closing means for closing the sound emitting holes (22a) in a closed state of the both cabinets (1, 2), provided in any one or both of the cabinets (fig. 1b).

Re Claim 2, Ikeda et al, discloses the foldable portable terminal according to claim 1, wherein the closing means comprises detection means for detecting an open state and a closed state of the both cabinets (1, 2) (abstract) and a shutter mechanism (7) for opening/closing the sound emitting holes (22a) in accordance with the detection (fig. 3: 300), the shutter mechanism (7) comprising a shutter member (70) supported so as to be capable of entering between opposed faces of the sound emitting surface of the first speaker (41) and the sound emitting holes (22a) (fig. 3: 300), and a drive mechanism (72) for reciprocating driving the shutter member (70) in accordance with the detection (fig. 3: 400), the shutter member (70), with operation of the drive mechanism (72) (fig. 3: 300 & 400), entering between the opposed faces to close the sound emitting holes (22a) in the closed state of the both cabinets (1, 2) (fig. 3: 400), and escaping from between the opposed faces to open the sound emitting holes (22a) in the open state of the both cabinets (1, 2) (fig. 3: 400).

Claim 5 has been analyzed and rejected according to claim 1.

Re Claim 7, Ikeda et al disclose the foldable portable terminal according to claim 5, wherein the cover cabinet (2) comprises an inner cabinet half (28) (fig. 4: 117) forming the inner surface of the cover cabinet (2) and a rear cabinet half (29) forming the rear surface of the cover cabinet (2) (fig. 4: 120), joined to each other (fig. 1a: 101), and the partition wall is formed by a first projection (26)

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projecting from the inner cabinet half (28), a second projection (27) projecting from the rear cabinet half (29) (fig. 4: 124) and being opposed to the first projection (26) (fig. 4: 105), and a seal member (44) intervening between the both projections (26, 27) (fig. 4: 113).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al, US Patent 6,957,083 B2 as applied to claim 1 above, in view of Komiyama, US Patent Pub. 2004/0180705 A1.

Re Claim 3, Ikeda et al discloses the foldable portable terminal according to claim 1, wherein the openings (12a) and the sound emitting holes (22a) are provided in positions to be slightly staggered in a closed state of the both

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cabinets (1, 2) (fig. 1a: 103 & 205), but fails to disclose the closing means comprises a projection (73) formed within an inner surface area of the body cabinet (1) in a position to face the sound emitting holes (22a) in a closed state of the both cabinets (1, 2), the projection (73) closing the sound emitting holes (22a) in the closed state of the both cabinets (1, 2), and separating from the sound emitting holes (22a) with the cover cabinet (2) opened. However, Komiyama does (fig. 6b: 10; para 0037).

Taking the combined teachings of Ikeda et al and Mori as a whole, one skilled in the art would have found it obvious to modify the foldable portable terminal according to claim 1, wherein the openings (12a) and the sound emitting holes (22a) are provided in positions to be slightly staggered in a closed state of the both cabinets (1, 2) (fig. 1a: 103 & 205) of Ikeda et al with the closing means comprises a projection (73) formed within an inner surface area of the body cabinet (1) in a position to face the sound emitting holes (22a) in a closed state of the both cabinets (1, 2), the projection (73) closing the sound emitting holes (22a) in the closed state of the both cabinets (1, 2), and separating from the sound emitting holes (22a) with the cover cabinet (2) opened as taught in Komiyama does (fig. 6b: 10; para 0037) so that communication can occur when the cabinets are closed.

Re Claim 4, the combined teachings of Ikeda et al and Komiyama disclose the foldable portable terminal according to claim 3, wherein the projection (73) is formed from an elastic resin (Komiyama, para 0037).

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Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al, US Patent 6,957,083 B2 as applied to claim 5 above, in view of Lee, US Patent Pub. 2004/0132514 A1.

Re Claim 6, Ikeda et al discloses the foldable portable terminal according to claim 5, but fails to disclose wherein the partition wall is formed by a rib (25) projecting from one of two inner walls opposed to each other inside the cover cabinet (2) toward the other inner wall, and a cushion member (43) intervening between an end of the rib (25) and the other inner wall. However, Lee does (para 0030).

Taking the combined teachings of Ikeda et al and Lee, one skilled in the art would have found it obvious to modify the foldable portable terminal of Ikeda et al with wherein the partition wall is formed by a rib (25) projecting from one of two inner walls opposed to each other inside the cover cabinet (2) toward the other inner wall, and a cushion member (43) intervening between an end of the rib (25) and the other inner wall as taught in Lee (para 0030) so that the screen will not be damaged.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al, US Patent 6,957,083 B2, in view of Miyashita, US Patent 6,731,912 B1.

Re Claim 8, Ikeda et al discloses a foldable portable terminal comprising a body cabinet (1) and a cover cabinet (2) openably/closably coupled to each other (figs. 1a & 1b); a microphone (63) (fig. 1a: 205) and a first speaker (41) (fig. 1a:

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103) disposed on inner surfaces of the body cabinet (1) and the cover cabinet (2) in positions opposed to each other with the both cabinets closed (figs. 1a & 1b); and a second speaker (42) disposed on a rear surface of the cover cabinet (2) (fig. 1b: 106), but fails to disclose wherein the microphone (63) is rotatably disposed at an end of the body cabinet (1), and capable of facing a direction deviating from the cover cabinet (2) in a closed position with the both cabinets closed. However, Miyashita does (fig. 3: 20a).

Taking the combined teachings of Ikeda et al and Miyashita, one skilled in the art would have found it obvious to modify the foldable portable terminal comprising a body cabinet (1) and a cover cabinet (2) openably/closably coupled to each other (figs. 1a & 1b); a microphone (63) (fig. 1a: 205) and a first speaker (41) (fig. 1a: 103) disposed on inner surfaces of the body cabinet (1) and the cover cabinet (2) in positions opposed to each other with the both cabinets closed (figs. 1a & 1b); and a second speaker (42) disposed on a rear surface of the cover cabinet (2) (fig. 1b: 106) with wherein the microphone (63) is rotatably disposed at an end of the body cabinet (1), and capable of facing a direction deviating from the cover cabinet (2) in a closed position with the both cabinets closed as taught in Miyashita (fig. 3: 20a) to enable efficient voice transmissions for comfortable telephone conversations even when the microphone and the mouth are placed a little away from each other.

Re Claim 9, the combined teachings of Ikeda et al and Miyashita disclose the foldable portable terminal according to claim 8, wherein it is possible to set a first call mode for causing the microphone (63) (Miyashita, fig. 3: 20a) and the

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first speaker (41) (Ikeda et al, fig. 1a: 103) to function with the both cabinets opened and a second call mode for causing the microphone (63) (Miyashita, fig. 3: 20a) and the second speaker (42) (Ikeda et al, fig. 1a: 106) to function with the both cabinets closed, and the microphone (63) is set in the first call mode to a first rotational posture where it faces the inner surface side of the body cabinet (1) (Miyashita, fig. 3: 20a), and set in the second call mode to a second rotational posture where it faces a direction deviating from the cover cabinet (2) in a closed position (Miyashita, fig. 3: 20a).

Re Claim 10, the combined teachings of Ikeda et al and Miyashita discloses the foldable portable terminal according to claim 9, wherein the microphone (63) is incorporated in a transmission unit (6) rotatably disposed on an end of the cover cabinet (2) (col. 5, lines 46-48), and the transmission unit (6) comprises a sound collecting hole (62) for introducing a sound wave toward the microphone (63) (col. 5, lines 1-6).

Re Claim 11, the combined teachings of Ikeda et al and Miyashita disclose the foldable portable terminal according to claim 10, wherein the transmission unit (6) is rotationally driven by manual operation (col. 7, lines 21-25).

Re Claim 12, the combined teachings of Ikeda et al and Miyashita disclose the foldable portable terminal according to claim 10, wherein the transmission unit (6) is rotationally driven by a reciprocation drive device (col. 7, lines 34-43).

Contact

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to George C. Monikang whose telephone number is 571-270-1190. The examiner can normally be reached on M-F. alt Fri. Off 7:30am-5:00pm (est).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

George Monikang

4/16/2007 ,



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